April 2007

Socio-economic Series 07-003

Wood Buffalo Affordable Housing Project Charrette

INTRODUCTION

From 1999 to 2006, the population of the Regional Municipality of Wood Buffalo rose 71 per cent, to 67,067. This phenomenal growth was fuelled by the rapid expansion of the local petroleum industry, in turn fuelled by rising oil prices.

One result of the growth has been a dramatic increase in the average price of housing and a widespread housing shortage. The average earnings for full-time employees in Fort McMurray were more than 35 per cent higher than workers in the rest of Alberta—whose average earnings were 56 per cent higher than workers in the rest of Canada.[1] Housing costs rose even faster—27 per cent between March 2005 and March 2006 alone[2]—to make Fort McMurray housing prices the highest in Alberta. In November, 2006, the average sale price for a detached house in Fort McMurray was $484,798.[3]

The high wages in Fort McMurray are driven by petroleum industry workers. The high housing prices, though, affect everyone in Fort McMurray. People who do not work in the petroleum industry, such as teachers, nurses and service sector employees, have difficulty finding housing they can afford. The cost of housing and limited housing supply also make it difficult for employers to attract and retain a stable workforce.

The council of the Regional Municipality of Wood Buffalo responded to this situation by creating a not-for-profit, affordable housing corporation, the Wood Buffalo Housing and Development Corporation (WBHDC) in 2001.

The Corporation's mandate is to address the community's affordable housing needs and provide a range of affordable housing options to accommodate diverse housing needs. The Corporation finances itself with proceeds from its land development projects and generally accessible federal and provincial government funding programs.[4]

This *Research Highlight* summarizes a design charrette held by WBHDC in conjunction with CMHC to determine a design for a medium-density, affordable housing project called Parsons Creek Village, an 8.1 ha (20 acre) site in Fort McMurray. This *Highlight* describes the key site characteristics, the charrette structure, the development principles followed, the project outcomes and the status of the project in December 2006.

Site characteristics

Parsons Creek Village is within the Timberlea area, an existing, developing residential district. The site is designated for medium-density residential development, with a maximum overall density of 45 units per hectare and a maximum height of four storeys.

The site is an undeveloped greenfield, with two elementary schools being developed to the north and a high school planned to the east. There is a partially completed commercial activity node south of the site. The rest of the surrounding area is characterized by ongoing low- and medium-density residential projects.

The previously cleared, relatively flat site is characterized by clay soils typical of the area and is technically well-suited for development. Service connections for water and sanitary and storm sewers are available from the bordering roadways.

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1 Statistics Canada

2 www.woodbuffalo.net, Cost of Living, Housing (provided by the Fort McMurray Real Estate Board)

3 www.woodbuffalo.net, Cost of Living, Housing (provided by the Fort McMurray Real Estate Board)

4 www.seniors.gov.ab.ca, Housing Support Programs, Affordable Housing

Canada

CMHC SCHL
HOME TO CANADIANS

Figure 1 Wood Buffalo Housing and Development Corporation

Charrette structure

The design charrette was held on February 3, 4 and 5, 2005 in Fort McMurray. Representatives from special interest groups in the region were specifically invited, as were neighbouring residents. Each design team included representatives from WBHDC, CMHC, and Alberta Community Development, as well as planners, an architect and a landscape architect.

Figure 2 Wood Buffalo Housing and Development Corporation

The 39 charrette participants included the mayor and a councillor of the Regional Municipality of Wood Buffalo; regional municipality departmental staff; utility companies; family services; health care providers; the faith community; school boards; seniors; support providers for the disabled; a variety of other community assistance providers and the general public. Attendance varied throughout the charrette, as not all participants were able to attend all sessions.

The charrette began with a site tour and speeches from WBHDC, CMHC representatives, and the mayor of the Regional Municipality. Representatives of the regional planning and development department presented information about the existing land use designation for the site and its parameters, as well as basic information about urban design principles. A session on working effectively in partnerships was also held and guiding principles governing the workshop were established.

Participants were divided into three groups of five or six, each guided by a design team member. Each group was given a small-scale site plan, scale examples of built forms permissible within the land use designation and drawing materials. The CMHC representative gave a presentation about sustainability options in design, such as aging in place, accessibility, and adaptability, to help guide the design process. Design sessions then began and were interspersed with feedback opportunities for the large group. This process continued until the many concepts were condensed into a series of guiding principles, which ultimately guided the final project design.

Each day's session was communicated to the public through evening open houses. The first open house started with a presentation to address any potential NIMBY (Not In My Backyard) sentiments and to encourage and ensure constructive participation by residents. The second open house shared the progress of the design team and charrette participants. The final open house presented the community with the final project design.

Development principles

The following guiding principles were established through analysis by all charrette participants of the initial small group designs and group discussions about attributes of healthy communities.

- **Pedestrian friendly streetscape**—pedestrian and non-vehicular activity is to be encouraged in this development.
- **Central neighbourhood community centre**—a community centre with an orientation towards families is critical to the success of the project. This centre would facilitate community activities and celebrations and be specifically designed for families.
- **Accessible public park space**—park spaces will be within walking distance for area residents. Youth-focused activities and infrastructure will be encouraged.
- **Shared private amenity space**—private amenity spaces will be consolidated together where possible in place of larger front yards, with smaller individual amenity spaces for individual use in the back yard.

- **Compatibility with existing neighbourhood development**—the development will integrate well with the surrounding neighbourhood.
- **Crime Prevention Through Environmental Design (CPTED) principles**—CPTED principles will be used throughout the development to promote a sense of safety and security.
- **Quality housing with character**—building materials will be chosen carefully and architectural differences between housing styles will be encouraged.
- **Friendly atmosphere where neighbours communicate and interact regularly**—community interaction opportunities will be included in the community design.

Residents outlined the considerations they felt were required to make the project a success for their community. There were concerns about including social housing and participants and residents said that all efforts should be made to maintain the standards and quality of the surrounding community. Participants on the second day expressed strong interest in creating a community that emphasizes resident interaction, walkability, activity areas for children and provision of local child care.

Project outcomes

This is how the charrette addressed each development principle.

Pedestrian friendly streetscape

The orientation, width, and landscaping of the project roadway was an important consideration and took considerable time to determine. As the group designs evolved, there was a significant difference in roadway configuration.

One group chose to create two disconnected roadways, one providing access to the eastern portion of the site and the other providing access to the western portion of the site. A large pedestrian corridor through the centre of the site would ensure community connectivity, without allowing vehicular through-traffic between the commercial areas to the south and the schools sites to the north.

The other group proposed a sinuous road running through the centre of the community to provide both pedestrian and vehicular access through the site, as they felt the concerns relating to through-traffic would not unduly affect the development.

Though both designs addressed the objective of discouraging vehicular traffic and facilitated easy pedestrian access, it was determined that the sinuous roadway most closely suited the mobility needs of the community. (Figure 3)

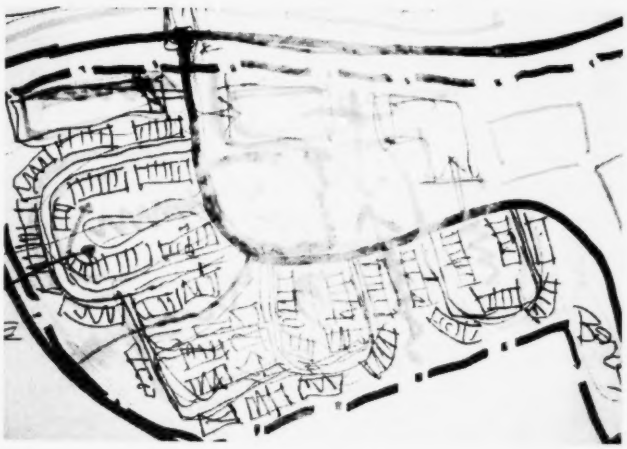

Figure 3 Site Plan (Charrette sketch)

A series of curves was used in the road to make vehicular traffic travel slower, thereby reducing the potential for the roadway to be used for through traffic. It was also suggested that the roadway would remain as private property so it could vary from municipal standards. This resulted in a reduction of the amount of on-street parking available on one side of the road and allowed that additional space to be used to expand the pedestrian pathways and landscaping area. Sidewalks were proposed on both sides of the street, with the north sidewalk being wide enough for bicycles and other non-motorized traffic.

Significant landscaping along the common roadway was suggested to provide a separation between vehicle and pedestrian traffic and to beautify the overall streetscape. Also, housing along the common roadway was brought closer to the street to provide an "urban room" feeling and promote ease of walking and access.

Central neighbourhood community centre

The WBHDC considered including a community centre for the site. The design charrette determined that the best location for a community centre would both minimize walking distances and be oriented towards families. It was therefore located roughly centrally within the development, but oriented more towards the townhouse units, which are expected to have a greater concentration of families than the apartment units.

The charrette also discussed use of the community centre. Participants said that the surrounding community has a lack of celebration spaces and places for community events, and that this centre should be designed to facilitate those uses. Adaptability was also desired, allowing the facility to be used for a variety of purposes, including drop-in programs, public health clinics and informal day care programs.

Accessible public park space

The charrette placed the public park next to the community centre. This would allow the consolidation of these two open spaces into one larger open space area, all of which would be open for public use. The park was located closer to the apartment area, to facilitate views and easy access to this shared amenity. The charrette groups suggested that the area include a play structure for younger children, some passive recreation park space, a walking trail and an outdoor skating rink.

Shared private amenity space

The completed concept promoted consolidation of the private amenity spaces associated with the townhouse area by placing parking and roadways in the rear of the homes and having the front entrances of the houses face one another. This allowed for large, shared open spaces with natural surveillance opportunities, conducive to facilitating children's play. A smaller private amenity space is also available at the back of the unit to allow fenced, private locations for barbecues and gardens.

Compatibility with existing neighbourhood development

The charrette also determined that this project should integrate well into the low-density character of the surrounding developments. The group determined that the project should maintain the approved planning density of 45 units per hectare for the site. In addition, apartment housing would be in the interior of the site, as far away as possible from the existing, low-density housing to the west of the site. Stacked townhouses would be located next to the apartment district and regular townhouses closest to the low-density area. This would allow an effective density transition across the site.

CPTED

CPTED (Crime Prevention Through Environmental Design) principles were integrated throughout the design. Parking areas are viewable from roadways where possible. Housing was oriented to provide views toward the main street to allow for informal surveillance. Yards were consolidated in several locations to provide further informal surveillance opportunities, particularly for locations likely to be used by children. Participants emphasized the necessity for effective lighting on walkways and roadways to facilitate visibility.

Quality housing with character

There was discussion throughout the charrette on built-form placement for residential units and the arrangement of different tenancy options. It was determined that the area should be characterized by quality development, removing any stigma associated with social housing by integrating it well with surrounding market housing. Specifics regarding materials were not determined.

Friendly atmosphere where neighbours communicate and interact regularly

It was anticipated that an interactive atmosphere would develop from the integration of the many community-focused design elements, such as the inclusion of a community centre, the development of common areas and the emphasis on non-motorized traffic. Community programming and activities within the community centre would also facilitate this atmosphere.

The final plan represents the synthesis of the collaboration and design principles achieved throughout the design charrette, as well as adherence to municipal policy direction. It projected an overall count of 354 units, consisting of 178 apartment units spread throughout four buildings, and 176 townhouses. The continuous, narrow roadway that will be common for all Parsons Creek Village residents was used to facilitate pedestrian through-traffic and to tie the community together.

The community centre and park were designed to be the social heart of the community. The park space was designed around the community centre, to allow for the use of the open space associated with the community centre as an informal part of the public park space. Charrette participants stressed the need to maximize the allowable density for the site to address the strong need for affordable housing in Fort McMurray. They also stressed the need for public and private open space and a sense of community for residents, many of whom are far from their original home.

The design charrette also included direction for designing housing to be accessible to residents with physical disabilities; providing housing for seniors; developing an informal babysitting cooperative among residents and designing flexible space within the community centre for classes or programming by community groups on an ad hoc basis.

This final design was presented to the community in the final open house. Residents seemed generally satisfied with the results and felt that the design addressed their concerns about density, amenities, parking, traffic and impacts on property values. All felt that it would fit well within the existing community.

CONCLUSIONS

Overall, this design charrette was responsible for bringing together a diverse group of participants to plan and design a development that can address the unique needs of this community. This was a first for Fort McMurray, especially in a housing climate in which buildings and developments were previously built with very little attention to layout, design and function.

Groups not typically included in the planning process had the opportunity to contribute to the overall design at its inception, which provided them increased opportunity for collaboration and input. Because of this input, and pledged continued interaction and support from the design charrette participants, this community will address needs for a variety of people and families for years to come.

Parsons Creek Village will allow WBHDC to provide a stable, affordable physical home environment in which families and individuals can thrive and flourish. WBHDC was very pleased with the outcome of the design charrette, as it established a plan that addresses many concerns in a short time frame, and as a result, minimizing resident and administrative concerns that would normally arise much later in the planning process.

NEXT STEPS

Following the design charrette, a number of steps were needed to bring the project to fruition. The design concept was reviewed by engineering staff, who made small modifications to the roadways to allow space for limited on-street parking for amenity areas, and to meet radius requirements for the street's curves in accordance with Transportation Association of Canada standards. Also, the feasibility of some of the apartment sites was questioned due to their size, and so some small shifts in the townhouse and apartment mix were made.

The project planners then asked for an amendment to the regional land use bylaw to redistrict the site from urban holding to medium-density residential in accordance with the approved area-level plan. Subsequent subdivisions and registrations are still underway.

Within 10 months, construction started on two apartment buildings on the site, with subsequent construction planned for the 2006 construction season.

Following a second Fort McMurray planning charrette for a large development south of town the WBHDC project manager commented "The community is being more involved and feeling they have a right to be involved... in future development and expansion of the city."

Figure 4 Final Site Plan

Figure 5 First Apartment Building (2006)

Figure 6 First Apartment Building (2006)

CMHC Project Manager: Doug Pollard

Consultant: Wood Buffalo Housing and Development Corporation

Housing Research at CMHC

Under Part IX of the ***National Housing Act***, the Government of Canada provides funds to CMHC to conduct research into the social, economic and technical aspects of housing and related fields, and to undertake the publishing and distribution of the results of this research.

This fact sheet is one of a series intended to inform you of the nature and scope of CMHC's research.

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